

MONTANA Economy at a Glance

OCTOBER 2011

EMPLOYMENT BY INDUSTRY

(Does not include self-employed or agricultural employment)

Industry Employment (in thousands)	Oct. (P) 2011	Sep. 2011	Net Change	Percent Change
Total Non-Agricultural	436.7	434.9	1.8	0.4%
Natural Resources & Mining	8.1	8.2	-0.1	-1.2%
Construction	22.6	23.2	-0.6	-2.6%
Manufacturing	16.1	16	0.1	0.6%
Trade, Transportation, & Utilities	89.0	88.3	0.7	0.8%
Information	7.4	7.4	0.0	0.0%
Financial Activities	21.3	20.8	0.5	2.4%
Professional & Business Services	39.3	38.7	0.6	1.6%
Education & Health Services	64.4	64.3	0.1	0.2%
Leisure & Hospitality	60.3	60	0.3	0.5%
Other Services	16.7	16.8	-0.1	-0.6%
Total Government	91.5	91.2	0.3	0.3%

(P) denotes preliminary figures

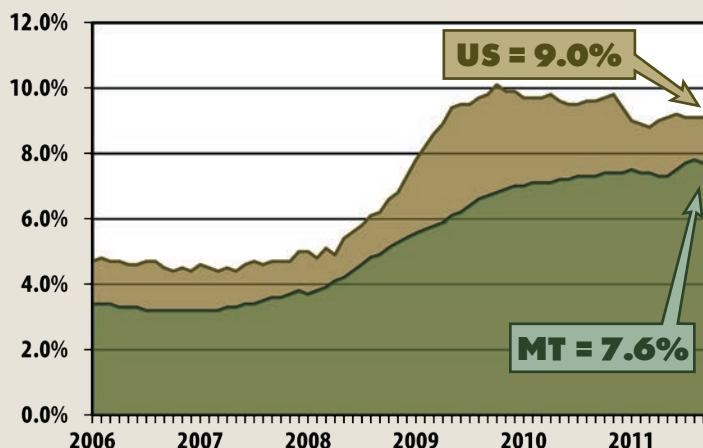
Montana's seasonally-adjusted, non-agricultural payroll employment increased by 1,800 jobs (+0.4%) over the month for October 2011. The Trade, Transportation, and Utilities sector showed the largest gains with 700 (+0.8%) added jobs. Employment in Montana's Professional and Business Services industry increased by 600 new jobs (+1.6%) over the month.

**Montana Department
of Labor and Industry**



UNEMPLOYMENT RATE

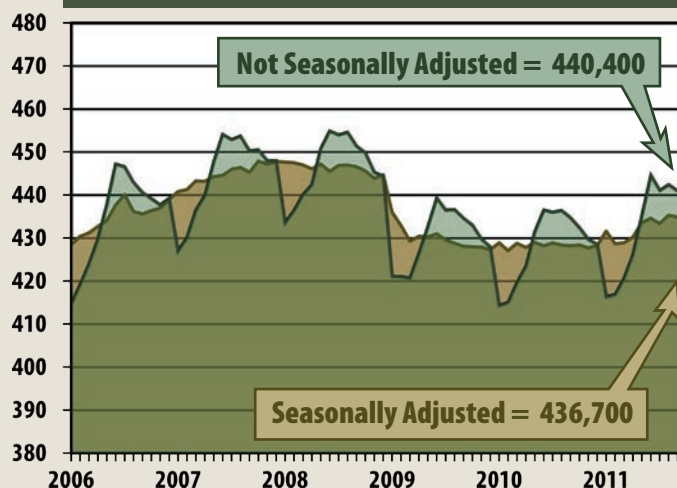
Seasonally Adjusted



Montana's seasonally-adjusted unemployment rate for October 2011 decreased to 7.6% from 7.7% in September. During the same time period, the national unemployment rate also decreased to 9.0% from 9.1% in September.

NON-FARM EMPLOYMENT

In Thousands



Research and Analysis Bureau

"Montana's Workforce Information Center"

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Gender Differences in Montana's Labor Force

by Aaron McNay, Economist

Over the past 60 years, the labor markets in the United States and Montana have changed significantly. Perhaps one of the most significant changes to occur over the past 60 years has been the movement of women into the workforce. The gradual increase of women in the labor force has had significant effects on the national economy, resulting in higher average household incomes, increases in the demand for some services, such as child care, and a higher material standard of living for most of the population. Montana has also experienced a similar movement of women into the labor force, with nearly 60% of working age women participating in the workforce. This article examines some of the economic and demographic characteristics of Montana's population and labor force, broken down at a gender specific level.

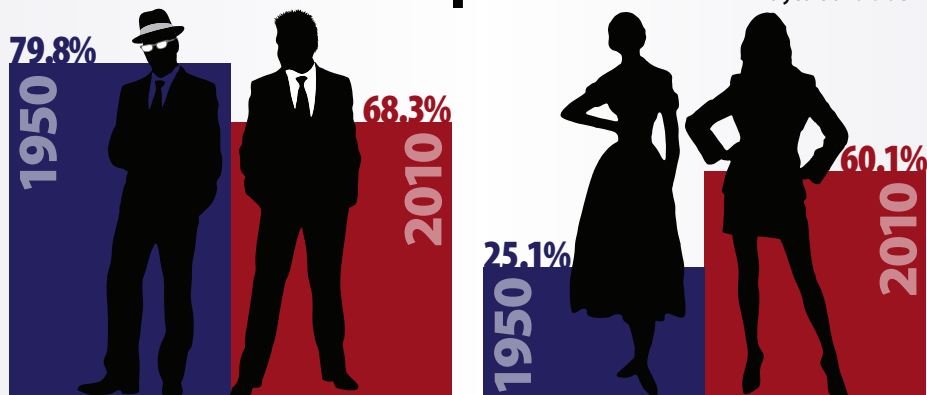
A majority of the data used in this article comes from the U.S. Census Bureau's American Community Survey (ACS). According to the U.S. Census

Bureau's website, "The American Community Survey provides current demographic, social, economic, and housing information about America's communities every year."¹ Both single-year estimates for 2009 and five-year estimates for 2005 to 2009 were used in this article. The single-year estimates provide the most current ACS information available, while the five-year estimates provide the estimates with less sampling variability.

In addition to the ACS, data from the U.S. Census Bureau's Local Employment Dynamics (LED) program were used to provide gender specific employment estimates for Montana. The LED program is designed to "provide information about trends in employment, hiring, job creation and destruction, and earnings, with unprecedented details of geography, age, gender, and industry going as far back as 1990."² For this article, annual employment estimates for 2010 and annual wage estimates for 2009 were used.

Figure 1:

Labor Force Participation Rates in Montana, 16 years and older



Note: 1950 rates based on ages 14 years and older



Gender Differences in Montana and the Labor Force

Over the past 60 years, there has been a significant influx of women into the labor force all across the nation. From 1950 to 2010, the labor force participation rate for women in the United States increased significantly, moving from nearly 34% in 1950 to almost 59% in 2010. However, this trend has slowed down over the past 15 years, and may be reversing, at the national level, where the participation rate has declined from its peak of 60.3% in 2000 to only 58% in August 2011. Montana women followed a similar trend of increased labor force participation, with a female labor force participation rate increasing from 26% in 1950 to 60% by 2010 (Figure 1).

While the labor force participation for women has increased, the labor force participation rate for men has been declining. At the national level, the labor force participation rate for men declined from 86% in 1950 to 71% in 2010. The trend of declining labor force participation of men also occurred in Montana. In 1950, approximately 80% of men in Montana 16 years old and older were active participants in the labor force. By 2010, the labor force participation rate for men had declined to 68%.

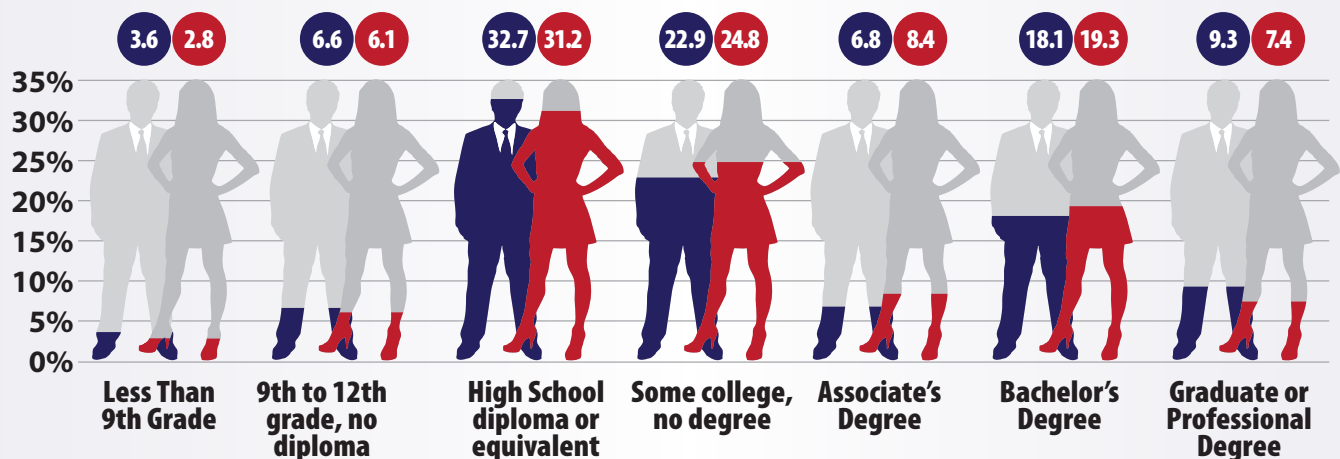
Based on estimates from the ACS, women in Montana appear to have a higher level of educational attainment than the male population. From 2005 to 2009, approximately 91.1% of women in Montana had at least a high school diploma, or its equivalence, while only 89.8% of the male population had the same level of education (Figure 2). A similar trend continues into post-secondary education. For example, 24.9% of men 25 years old and older in Montana had an Associate's or Bachelor's degree, while 27.7% of the female population had the same level of education. In fact, the only educational attainment level beyond a high school diploma where men had a larger proportion of its population was in the Graduate or professional degree level, with nearly 9.3% of the male population and 7.4% of the female population.

Even though women in Montana have a higher average level of educational attainment in Montana, they tend to earn less than men. For 2009, the ACS estimated that men in Montana had a median income level of approximately \$33,000, while women had an income level of \$21,500. When broken down by educational attainment, the difference in income levels continues, with men continuing to earn more than

Figure 2:

Educational Attainment in Montana

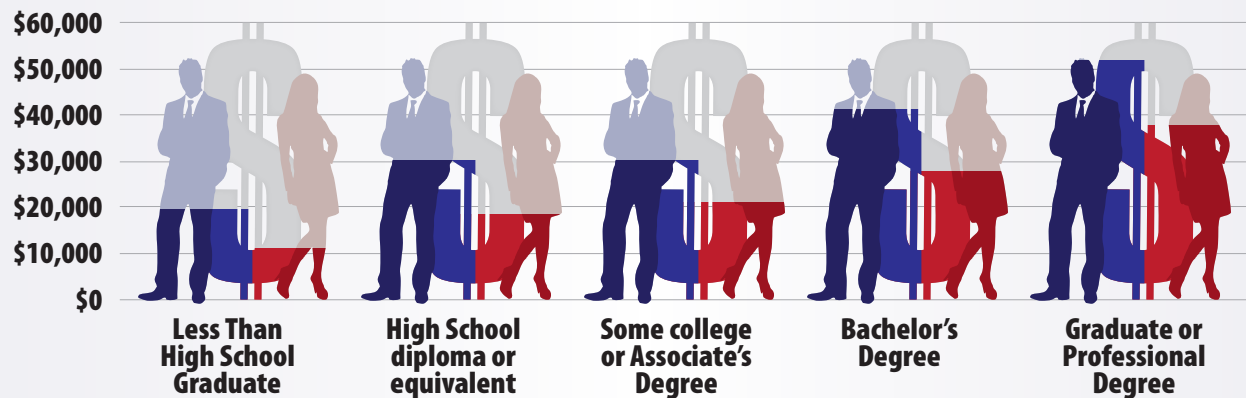
25 Years Old and Older,
2005 to 2009



**Figure 3:**

Median Earnings by Educational Attainment

Montanans 25 Years Old
and Older, 2009



women with similar levels of educational attainment (Figure 3). For example, the median earnings for a male in Montana with only a high school diploma were \$30,200, while the median earnings for women with the same educational attainment level were \$18,400. The relationship of higher median earnings levels for men continues for each educational attainment level, although the relative differences tend to decline as educational attainment increase.

One of the many reasons for the earnings differences between women and men, even when accounting for differences in educational attainment levels, is that women and men tend to work in different sectors of Montana's economy. According to the LED program, a significantly larger portion of women are employed in lower paying service providing industries when compared to men. When industries are ranked by their average annual pay levels, men comprised the majority of workers in four of the top five industries, while women comprised the majority of workers in three of the five lowest paying industries (Figure 4). For example, more than 80% of the people working in the Natural Resources and Mining industries, which was the highest paying industry in 2010, were men. At the same time, women make up more than 70% of

the Education and Health Services industry, which had the fourth lowest level of pay in 2010.

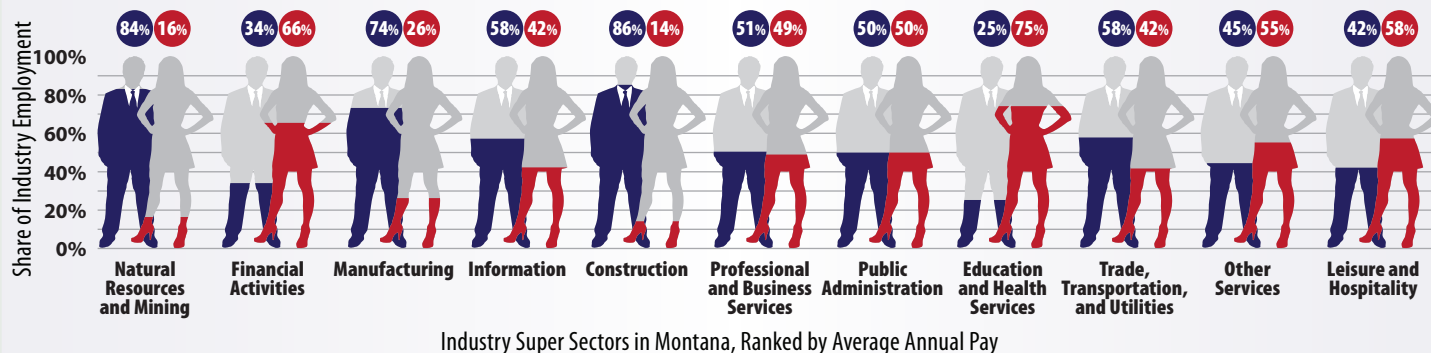
While the industry make-up is likely to explain some of the differences in earnings between women and men, it is not the only explanation. When pay levels are examined at the industry specific level, men still earn more each year on average, relative to women. For example, men employed in the Education and Health Services sector earned more on average than women, with an average annual earnings level of \$52,485, relative to \$31,900 for women in 2010.

One potential explanation for pay differences between men and women in the same industry is the relative concentration of full-time and part-time workers. According the U.S. Bureau of Labor Statistics, approximately 87% of working men in the United States were employed full-time in 2010, while 73% of working women were employed full-time.³ Another potential explanation is that women and men tend to engage in different occupations within the same industry. In the Health Care sector, there is a larger share of men employed as Doctors, while a larger proportion of women are employed as Registered Nurses.



Figure 4:

Employment in Montana by Industry and Gender, 2010



Source: *Local Employment Dynamics, Quarterly Workforce Indicators*

Unfortunately, it is impossible to determine the extent that these factors, and others, are having on the relative differences in pay between males and females in Montana without a significantly more detailed study of the data. In 2006, a more detailed analysis of the gender pay gap was performed by Montana's Department of Labor for employees in Montana's state government in 2006. According to the results of the study, a majority of the differences in pay between women and men in Montana's state government were due to differences in job tenure, job title, union affiliation and the numbers of hours worked on the job. However, even when all the different factors were controlled for, there was still a gap in earnings between men and women that was left unexplained. While the examination of state government employees cannot be directly compared to the labor market as a whole, the study of state government employees does indicate that all of the differences in pay between women and men in Montana may not be completely understood through economic explanations.

Over the past sixty years, the role of women in the labor force has increased significantly, while the role of men has been declining. In Montana, men composed 78% of the labor force in 1950, by 2010 the share of

men in the labor force declined to only 53%. In fact, women already make up a majority of professionals in several key industries of the economy. In the Health Care and Social Services sector alone, women make up nearly 80% of the workforce. In other key industries, such as Education and Finance and Insurance, women dominate the workforce as well. However, even with their concentration in many technical fields, such as Health Care, women tend to earn significantly less than men, even when controlling for varying levels of educational attainment. However, the pay gap has decreased over time and may continue decreasing as more women enter the labor force and take on full-time positions.

References:

¹American community Survey Design and Methodology, U.S. Census Bureau, April 2009, http://www.census.gov/acs/www/Downloads/survey_methodology/acs_design_methodology.pdf

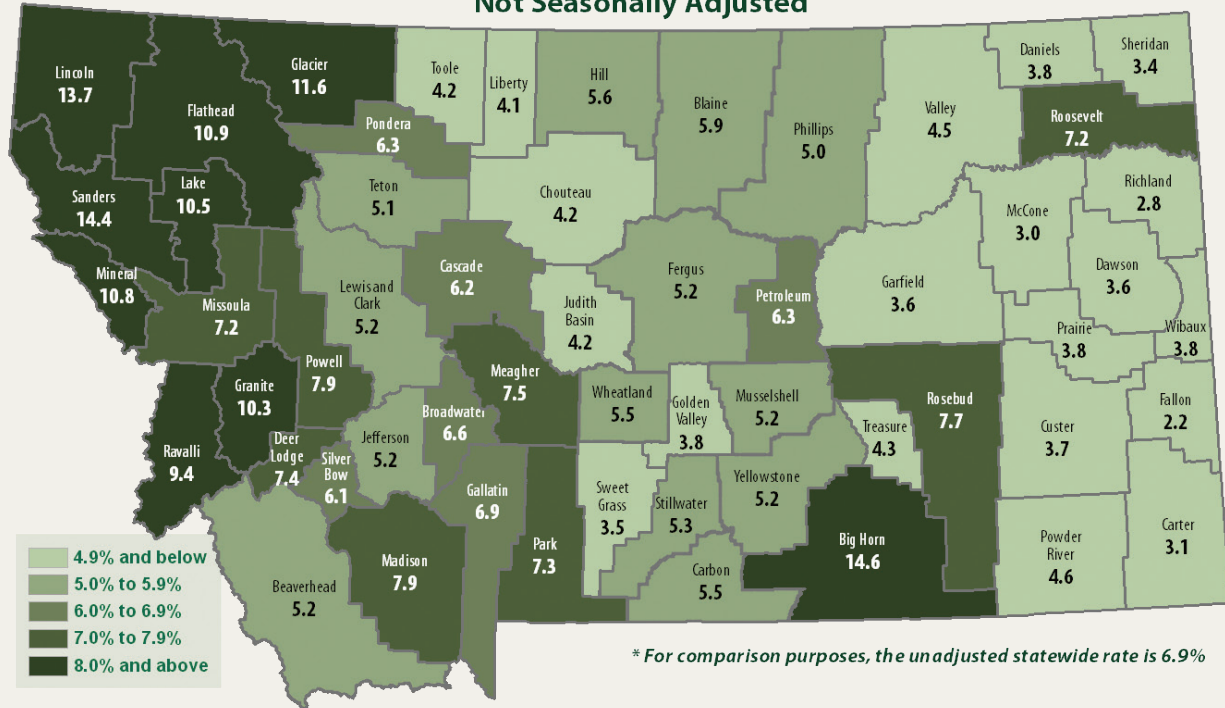
²LED New Data from the States and the U.S. Census Bureau, U.S. Census Bureau, Feb 2011, http://lehd.did.census.gov/led/led/doc/LEDonepaper_20110218.pdf

³Current Population Survey, U.S. Bureau of Labor Statistics, 2011, <http://www.bls.gov/cps/cpsaat8.pdf>

⁴"An Analysis of the Gender Wage Gap in the State Government Workforce," Eldredge, Brad and Turner, Tyler, Montana Department of Labor and Industry, March 2006

County Unemployment Rates* - October 2011

Not Seasonally Adjusted



* For comparison purposes, the unadjusted statewide rate is 6.9%

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